disclosure described herein are capable of operation in other sequences and/or arrangements than are described or illustrated herein.

What is claimed is:

1. A system for pumping, comprising:

a plunger configured to move toward and away from a tube;

a spring configured to bias the plunger toward the tube;

an actuator configured to cause the plunger to move away from the tube, wherein the actuator is further configured to mechanically disengage from the plunger;

a position sensor configured to sense a position of the plunger;

a real-time processor in operative communication with the position sensor to receive the sensed position of the plunger, wherein the real-time processor is configured to:

estimate fluid flow within the tube using the sensed position of the plunger,

log an infusion of fluid to generate at least one infusion log, and

interact with an intercommunication task within the real-time processor to communicate the log; and

a user-interface processor configured to:

receive the log via an intercommunication process,

store the log in a database, and

communicate the log via a device gateway communication manager.

2. The system according to claim **1**, wherein a communication between the intercommunication task and the intercommunication process is asynchronous.

3. The system according to claim **1**, wherein the user-interface processor is further configured to execute an infusion manager process to control the infusion of fluid.

4. The system according to claim **3**, wherein the user-interface processor is further configured to select a Drug Administration Library entry to validate the infusion of fluid.

5. The system according to claim **3**, wherein the user-interface processor is further configured to select a Drug Administration Library entry to pass a dose mode, a dose limit, and a default value to a user interface view.

6. The system according to claim **5**, wherein the user-interface processor is further configured to echo a parameter entered by a user on a user interface back to the user interface view.

7. The system according to claim **1**, wherein the user-interface processor is configured to provide error detection of flawed messages.

8. The system according to claim **1**, wherein the device gateway communication manager is configured to communicate over a wireless connection.

9. The system according to claim **1**, wherein the device gateway communication manager is configured to manage communications with a device gateway server.

10. The system according to claim **1**, wherein the device gateway communication manager is configured to poll a device gateway server for updates.

11. The system according to claim **1**, wherein the device gateway communication manager is configured to poll a device gateway server for updates.

12. The system according to claim **1**, wherein the device gateway communication manager is configured to upload the log.

13. The system according to claim **12**, wherein the device gateway communication manager is configured to flag the log within the database after uploading the log.

14. The system according to claim **12**, wherein the device gateway communication manager is configured to flag the log within the database after uploading the log.

15. The system according to claim **12**, wherein the log is an event.

16. The system according to claim **15**, wherein the event is an status.

17. The system according to claim **15**, wherein the event is a measurement.

18. The system according to claim **15**, wherein the event is a therapy history event.

19. The system according to claim **1**, wherein the database is configured as a buffer to a plurality of logs including the log prior to uploading into a device gateway server.

20. The system for pumping according to claim **1**, further comprising an inlet valve and an outlet valve, wherein the system for pumping is configured to:

close the inlet and outlet valves;

disengage the actuator from the plunger;

determine a first position of the plunger;

open the outlet valve;

engage the actuator to the plunger;

determine a second position of the plunger; and

estimate a volume of fluid flow using the first and second positions.

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